

Two New Species of *Dichomeris* (Lepidoptera, Gelechiidae) from Taiwan

Kyu-Tek PARK

Center for Insect Systematics, Kangwon National University, Chuncheon, 200-701 Korea.
E-mail: cispa@kangwon.ac.kr

Abstract Two new species; *Dichomeris aculata* syn. nov. and *D. elegans* sp. nov. are described from Tawan.

Key words Taxonomy, Lepidoptera, Gelechiidae, *Dichomeris*, *aculata*, *elegans*

DESCRIPTIONS

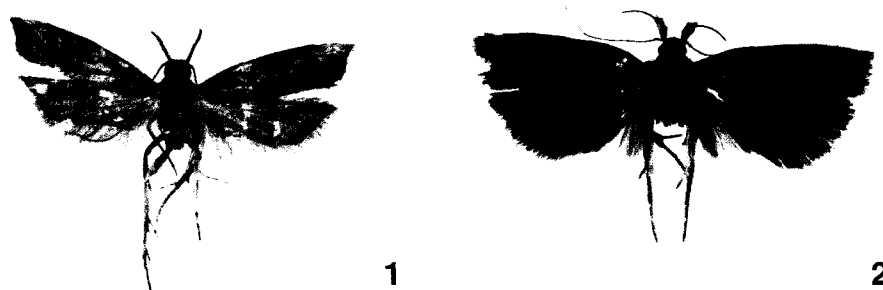
Dichomeris aculata Park, sp. nov.

(Figs 1, 3, 5)

Diagnosis. This species is similar to *Dichomeris taiwana* Park & Hodges, and can be distinguished by the following characters: labial palpus very slender, anteriorly expanded, brown on inner surface of 2nd segment; broad terminal fascia with strongly arched anterior margin on forewing; apex sharply pointed; and lacking a pair of long scaletufts on mesothoracic anepisternum in the male.

Description. Forewing length 6.5 mm. Head brownish orange, darker on lateral side of frons. Mesoscutum brownish orange. Tegula pale brownish orange dorsally, dark brown on anterior margin. Antenna with dark gray rings on flagella dorsally and with dense sensorry scales ventrally. Labial palpus weakly upturned, rather expanded anteriorly; 2nd segment thickened, with slight scaletufts dorsally, dark brown on outer surface, brownish orange speckling with dark brown scales on inner surface; 3rd segment rather short, about 2/3 length of the 2nd, mainly dark brown; apex yellowish white. Male lacks a pair of long hairpencils from mesothoracic anepisternum. Forewing slightly dilated posterior; ground color reddish orange, speckled with dark-brown scales sparsely, anterior margin dark fuscous before 1/2 length, a dark small stigma near middle of cell; postmedian fascia rather broad, anterior margin outwardly curved; apex sharply pointed; termen relatively sinuate; veins R₃ connate, R₄ and R₅ stalked, with extremely long stalk. Hindwing gray, with a well-developed pecten on the base of the cubitus; apex sharply produced; termen strongly sinuate; fringes concolorous. Female: unknown.

Male genitalia (Figs 5, 6). Uncus relatively long, distal margin rounded, with a pair of long setae dorsodistally and 5 pairs of short setae in an irregular row along lateral sides. Gnathos slender; culcitula



Figs 1-2. 1. *Dichomeris aculata*, sp. nov. (holotype); 2. *Dichomeris elegans*, sp. nov. (paratype).

relatively large, with rounded distal margin. Valva relatively dilated at distal part, slightly protruded near end of anterior margin; ventral free lobes at base at base digitate, rather stout. Vinculum about equal length of tegumen plus uncus; lateral lobes arising beyond middle, relatively short, with obtuse apex, setosed on inner surface; sacal region almost straight, broad. Sicae asymmetrical angled at basal inner corner; left lobe with numerous short, spinelike denticles along ventrolateral margin, apex pointed; right one slightly longer than left, with a sharp, large process at 3/4 length ventrally, bearing numerous denticles from base to branch along ventrolateral margin. Aedeagus stout, width about 1/3 of its length; basal part broad at base, about 2/5 length of whole length; distal lobe from zone broad, heavily sclerotized, apex obtuse; weakly sclerotized internal lobe reaching 3/4 of aedeagus; left lateral lobe separated into two branches, dorsal one longer than ventral one with numerous spinelike denticles on dorsolateral surface; right one shorter than left, with a short process near 2/3 length on inner margin; apex pointed.

Type. Holotype: male, Kenting Bot. Garden, Pingtung Co., Taiwan, 22–25 VII 1980 (D. Davis), gen. prep. USNM-87331/Park—preserved in the U. S. National Museum, Washington D.C., USA.

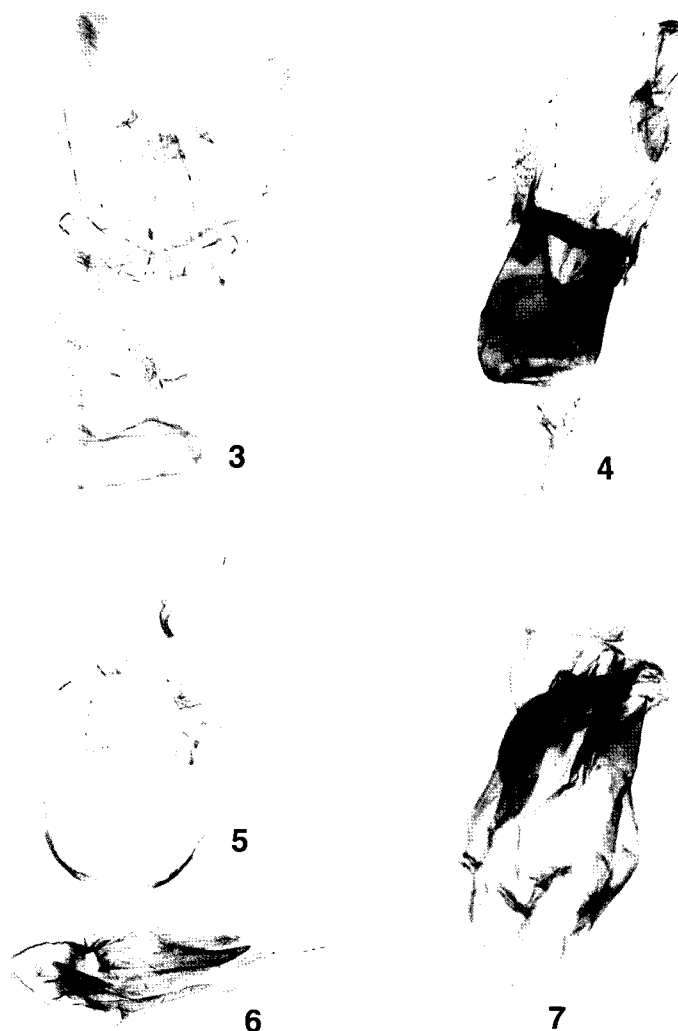
Distribution. Taiwan.

***Dichomeris elegans* Park, sp. nov.**

(Figs 2, 5, 6, 7)

Diagnosis. This species is externally very similar to *trilobella* Park and Hodges from Taiwan, and *D. bisignellus* (Snellen) from Celebes and Indonesia, but it can be distinguished from *D. trilobella* Park & Hodges by the male genital character, especially in the shape of sicae and aedeagus; and from *D. bisignellus* by the female genitalia, according to the diagnosis in the *D. trilobella* by Park and Hodges (1995: 42).

Description. Forewing length 9.0–9.5 mm. Head pale brownish orange to grayish brown, with erect scales around scape of antenna. Mesoscutum light brown, Tegula pale light brown dorsally, dark brown on anterior margin. Antenna with dark brown, broad annulations on flagella dorsally, not ciliate ventrally. Second segment of labial palpus large, expanding triangularly, brown on outer surface and brownish



Figs 3-7. Male and female genitalia: 3. male genitalia of *Dichomeris aculata*, sp. nov.; 4. ditto, aedeagus; 5. male genitalia of *Dichomeris elegans*, sp. nov. ; 6. ditto, aedeagus; 7. ditto, female genitalia.

orange on inner surface; apex suffused with whitish-tipped scales on anterordorsal margin; 3rd segment slender, longer than 2nd. Forewing ground color grayish brown, dark-brown scales scattered irregularly; costa arched at basal 1/4, then almost straight; costal blotch dark brown, triangular with sharp angle or not angled; the other smaller patch between costal blotch and apex; two small brown discal spots at middle and at end of cell; apex more or less acute, termen relatively sinuate; veins similar to *trilobella* Park and Hodges. Hindwing gray; apex more or less obtuse; termen strongly sinuate; fringes concolorous.

Male genitalia (Figs 5, 6). It is very similar to those of *trilobella* Park and Hodges, but can be discriminated by the shape of sicae and aedeagus: Left sicae branched into two lobes beyond basal 1/3,

whereas branched near base in *trilobella*; right one expanded toward apex, much shorter than long lobe of left ones (almost same length in *trilobella*), distal margin indented with acute lateral apices and with a small projection preapically on ventral surface. Aedeagus with sickle-shaped lateral lobes, dorsal surface heavily sclerotized, extending to a projection as same as *trilobella*; cornutus stout, horn-shaped, slightly shorter than longer lateral one, whereas in *trilobella* much slender, needle-shaped, longer than lateral ones.

Female genitalia (Fig. 7). Not easily separable from that of *D. trilobella*. Apophyses anteriores short, less than 1/3 of apophyses posteriores. Ductus bursae not discrete from corpus bursae, with a heavily sclerotized broad plate at dorsolateral side. Corpus bursae sclerotized with well-developed longitudinal ridges, but membranous on anterior 1/3; signum absent.

Type. Holotype: male, Kenting Park 50 m, Pingtung Co., Taiwan, 29–31. VIII. 1983 (J.B. Heppner), gen. prep. USNM-87441/Park, in USNM. Paratypes: 3♀, same data as the holotype, gen. prep. USNM-87440/Park—preserved in the Florida State Collection of Arthropods (FSCA), Gainesville, USA.

Distribution. Taiwan.

REFERENCES

- Li, H. and Z. Zheng. 1996. A systematic study on the genus *Dichomeris* Hubner, 1818 from China. SHILAP Revta. lepid. 24(95): 229–273.
- Park, K.T. and Ronald W. Hodges. 1995. Gelechiidae (Lepidoptera) of Taiwan III. Systematic revision of the genus *Dichomeris* in Taiwan and Japan. Ins. Koreana 12: 1–101.
- Park, K.T. 1994. Genus *Dichomeris* in Korea, with descriptions of seven new species (Lepidoptera, Gelechiidae) Ins. Koreana 11: 1–25.

(Received: September 1, 2001)

(Accepted: October 20, 2001)